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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,271	03/21/2001	Shen Ye	10467.51US01	3973

7590

03/26/2003

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EXAMINER

LEE, BENNY T

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



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SERIAL NUMBER	FILING DATE	FIR	NAMED APPLICANT	ATTORNEY DOCKET NO.

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EXAMINER	
ART UNIT	PAPER NUMBER
	9

DATE MAILED:

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

- ☐ This application has been examined ☒ Responsive to communication filed on 27 Dec 2002 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire Three (3) month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474 | 5. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-18 are pending in the application.
- Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 1-3, 5-10, 12-16 are rejected.
5. ☒ Claims 4, 11, 17, 18 are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. These drawings are: ☐ acceptable; ☒ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☒ The proposed drawing correction, filed 27 Dec 2002, has been ☒ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received
- ☐ been filed in parent application, serial no. _____; filed on _____
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

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The disclosure is objected to because of the following informalities: Note that the following reference labels in the indicated drawing figures need to be correspondingly described in the specifications description of such drawing figures: fig. 2 (~~long/short transmission line~~); figs. ~~3,4~~, (~~+, -~~); fig. 9(a), (~~930~~);. Appropriate correction is required.

The drawings are objected to because of the following: In fig. 4, reference label ~~--13--~~ needs to be labeled. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Regarding applicant's comments pertaining to (+, -) in Figs. 3,4, it is suggested that a explicit explanation of the ~~--polarity--~~ of (~~+, -~~) be provided in the specification. Regarding reference label (~~930~~), contrary to applicant's assertion, such reference label can not be found at page 9, line 8 of the original or amended specification.

The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

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The attempt to incorporate subject matter into this application by reference to U.S. Patent applications 40578, and 679783, respectively is improper because it has not yet been established as to whether all three of the cited applications have either been allowed or patent to permit proper incorporation by reference of "essential material".

Applicant is advised that should the above noted application not become allowed or patented before the indicated allowance of this application, it may be necessary to explicitly provide the "essential material" which is currently incorporated by reference in the present application.

A person shall be entitled to a patent unless-

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Okamura et al (of record).

Note that Fig. 19 discloses a strip-line circuit (4a, 4b, 4c, 4d) formed as a closed conductive loop (4) disposed on a multi-layer substrate structure (1) having multiple dielectric layers interposed with conductive loops at nodes are transmission lines (6, 7) which are arranged such that the conductive loop is divided into segments of different length which inherently provides segments of different impedance. Moreover, note that an inherent shunt capacitance is provided between the closed loop conductor (4) and the ground plane (5).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura et al and Takahashi et al taken in combination (both of record).

Takahashi et al (Fig. 8) discloses a filter (81) comprising at least two closed loop conductors (33) having input/output nodes with transmission line coupling (32, 83, 34).

As disclosed in Okamura et al, fig. 19 thereof, a closed conductive loop to effect a shunt capacitor with a ground electrode is provided.

Accordingly, it would have been obvious in view of the references taken together to have realized the filter of close conductive loop in Takahashi et al (fig. 8) to have been the specific configuration taught by Okamura (fig. 19). Such a modification would have been considered an obvious substitution of art recognized conductive loop structures, thereby suggesting the obviousness of such a combination.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura et al in view of Schmidt et al (both of record).

Schmidt et al discloses that an oxide superconductor is disposed on a lanthanum aluminate substrate to realize a filtering structure.

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Accordingly the Okamura et al structure being realized as an oxide superconductor on a lanthanum aluminate substrate would have been obvious, especially since it would have imparted such low loss characteristics to such a configuration.

Claims 15, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the above rejection as applied to claim 14 above, and further in view of Schmidt et al (of record).

Likewise, for reasons set forth above, it would have been obvious to have further modified the above combination such as to have included the recited superconductor and dielectric material.

Applicant's arguments filed 17 December 2002 have been fully considered but they are not persuasive.

Applicant has argued with respect to Okamura et al (fig. 19) that the resonator in fig. 19 being grounded at terminal (6) thus can not provide for a shunt capacitor. Similarly, with respect to the obviousness combinations, it has been argued that there would have been no motivation to have combined the references to provide for the "shunt capacitor comprising a closed conductive loop" as claimed.

Contrary to applicant's assertion, it should be noted that Okamura et al does indeed explicitly teach that a shunt capacitance effect is effected by the structures disclosed therein. In particular, applicant's attention is directed to col 6, ls 21-27, which describes that a floating capacitance is mainly provided between electrode pattern (4) and earth electrode pattern (5). This is what is commonly characterized in the art as a "shunt capacitance". Although, this description

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pertains to the first embodiment (e.g. Fig. 2) of Okamura et al, such a principle clearly extends to the other embodiments (i.e. the closed loop in Fig. 19) in Okamura et al, since all embodiments share like structure, including an earth electrode (6).

As for the obviousness combinations, it should be noted that the obviousness combination pertain to features other than the “shunt capacitance” effect. For example, with respect to Takahashi, the obviousness involves plural closed loop resonators forming a filter, and with respect to Schmidt, the obviousness pertains to the superconductive and dielectric materials. Moreover, as established in the preceding rebuttal, the Okamura et al does indeed provide a closed loop shunt capacitance, and thus that issue is not germane to the obviousness combination as set forth in the above rejections.

Claims 4, 11, 17, 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

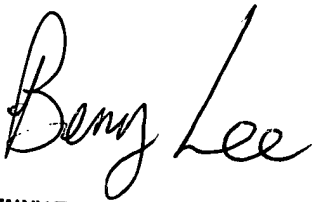
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benny Lee whose telephone number is (703) 308 4902.

A handwritten signature in cursive script that reads "Benny Lee". The signature is written in black ink and is positioned above the printed name and title.

BENNY T. LEE
PRIMARY EXAMINER
ART UNIT 2817

B. Lee

March 21, 2003